/333 cont./

Chapter II

Agriculture

241 The Chiriguano, like the Guarani and the Chané, their ancestors, are excellent farmers, and the working of the soil represents their principal occupation and their great concern. 243 For them corn is of prime importance; it constitutes the basis [273] of their diet, for it enters into the preparation of most of their dishes and in addition gives them their preferred drink, chicha or kāwi.

[132] The sandy lands of the western Chaco and its climate, [134] hot and dry a great part of the year, but also rainy during the summer months, seem to be particularly suitable for this grain. I have never seen such beautiful fields of corn anywhere. The ears are large, well filled out /334/ with kernels, and extremely tasty. The Bolivian half-breeds and settlers who are coming in greater and greater numbers to take the place of the Indians devote themselves like them to the growing of corn, which, with cattle-raising, is their main resource.

114 My trip to the Chaco, which took place from the month 243 of February to the month of June, did not give me a chance to [101] be present at the sowing which is done at the beginning of the rainy season. For many details I shall therefore be forced to [127] refer to Corrado (pp. 42 and 48), Campana (pp. 96-98), Nordenskiöld (2, pp. 181-184, and 10, pp. 23-24), to Nino (pp. 237-241), and Rosen (1, p. 205).

241 When a Chiriguano wishes to cultivate a new piece of 243 ground for himself and his family, he scours the environs of his village looking for a spot which may suit him and which is, in addition, easily irrigable. This condition is generally fulfilled by the lands at the foot of a hill or rising ground. The rain water which pours down there assures them of fertility.

/334 cont./

241 Before taking possession of a new plot of land the
423 Chiriguano is always careful to make sure that there is no trace
243 of previous cultivation. Otherwise the former owner or his
[685] descendants would have the right to lodge a complaint against him to the chief of the village.

[824] The Chiriguano makes known his new property right by planting any edible plant before the rainy season, for example, the large squash (gindako-wasu) which spreads everywhere and is not smothered by the underbrush. He can equally well insure possession of the chosen terrain by knocking down the underbrush all around and making big gashes in the trees (1).

[191] 1. Compare this manner of insuring property rights with the method observed by the Caxinawa /Cashinawa/ in the same circumstances: "I saw (an Indian is speaking) rising ground which is suitable for a planting. I am going to make a planting for this summer. I broke many branches on this hill to mark this excellent place. No one can make his clearing on this hill. This hill is excellent; do not go there to make your planting." (Abreu, p. 69.)

241 In the middle of the dry season, say, in August, the
243 Indian, with a long stick sharp on both sides, fells the underbrush which encumbers his future field and sets fire to it. This operation has the further advantage of fertilizing the soil, thanks to the bed of ashes, which is a rather good fertilizer.

The cultivated fields are usually cleaned up after the harvest.
[231] The domestic animals, who feed there with little expense, are first let out there, and then the fields are set afire.

[221] Sowing takes place in the month of November when the first
[821] rainstorms have softened the soil. This time is announced by the appearance of the Pleiades (itsu) above the horizon early in the morning.

/334 cont./

241 243 The Chiriguano who is getting ready to sow takes care to hoe his field and to rid it of all weeds. For this he uses /335/ a shovel, which I shall describe, in part from Campana 243 (p. 98), not having seen this instrument whole.

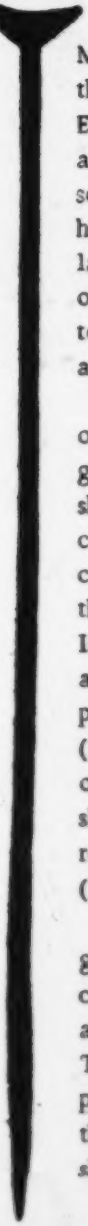
241 412 [824] The shovels (sipe of the Chiriguano, even not so long ago, were entirely of wood, preferably wood of the urundei (Astronium urundeuva F. Allemao) or of the palm siripa. Although narrower and longer, they resembled those of our bakers. The edges were straight, almost parallel, and only the cutting edge was slightly rounded at the sides. Toward the top they ended in a point, a [824] kind of embryonic handle, which was lengthened by a stick to which it was attached with ties made of churqui (Nilotica farnesiana), of lianas, or toboroši fibers. The two shovels examined by Campana measured 70 centimeters in length and 15 in width; one of them, however, was less wide at the top than at the bottom by several centimeters (Fig. 2).

Fig. 2. Shovel (sipe) made of wood, without its handle, formerly in use among the Chiriguano (from Campana, Pl. VIII, Fig. 1).

If the Chiriguano have abandoned the ancient wooden shovel, they have nevertheless faithfully kept the long handle to which it was attached and which permitted them to work the soil without having to bend over. A remark of psychological order becomes necessary in this regard. The Chiriguano [439] could well have acquired in the Syrians' stores, where they are available, shovels already provided with handles and ready to use. If they felt the need to modify the handle and to give it the traditional form, it is because it did *not correspond to the movements and position of the body and* hands which an age-old tradition had ingrained.

In each human group all manual labor requires certain set gestures to which, to a certain extent, the tools are adapted. This explains the variations these exhibit from country to country and even from tribe to tribe. With regard to this, Professor

241
412
243
[404]



Mauss used to cite to us the following example: during the great war the French soldiers did not much like using English shovels different from their own, and vice versa. The Chiriguano I have seen laboring on military roads in Bolivia handle our shovels exactly like any European laborer; but back home, when it is a question of working a field, they return immediately to the ancestral gestures and are constrained to adapt the form of their instruments to them.

The handle fits into a handgrip carved out of a small block of wood and set in with the greatest care. The latter generally takes the shape of a crescent on which the hand rests comfortably. The handgrips with an elegant curve, which gave an aesthetic character to the ancient spades, have become very rare. In the course of /336/ my trip I was able to acquire only two shovel handles which were provided with them. One comes from Ibopeyti (Fig. 3) and the other was made for me by an old Indian of the Ivu mission. The workmanship of this latter specimen is careless, but it reproduces fairly faithfully the ancient models (Fig. 4).

[126]

241
412
172
243

The use of the shovel among the Chiriguano probably dates back only three or four centuries. This instrument was unknown in ancient Paraguay where our Indians came from. The borrowing which could be presumed a priori has been confirmed by the discovery in the Quebrada de Humahuaca of wooden shovels similar in every detail to the ones I

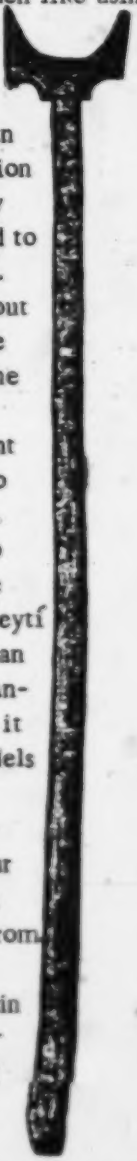


Fig. 3. Shovel handle. Prov.: Ibopeyti. (1/11 nat. size.)

Fig. 4. Shovel handle. Prov.: Ivu. (1/8 nat. size.)

/336 cont./

241 412 172 243 have described here. These finds were made in the ruins of the Alfarcito and of the Pukará de Tilcara (Debenedetti, 4, Fig. 17 and p. 32) and at the Huerta in the same Quebrada de Humahuaca. Numerous wooden shovels have been dug up at La Paya (Ambrosetti, 6, Figs. 236-237, pp. 457-458), and Ambrosetti supposes with justification that they were hafted like those of the modern Chiriguano. Debenedetti (1, p. 35) obtained a specimen of this instrument at Kipón in Salta province.

[191] This type of shovel is particularly well represented in the archeological material of the Chilean coast. Numerous specimens have been found in Calama, Chiuchiu, and Pica in Tarapaca province (Boman, 2, Vol. II, pp. 731-732 and Plate LXVIII a; and Uhle, 3, pp. 15-16 and Plate I).

[191] The half-breeds and Indians of the Bolivian altiplano still work the earth today with a spade which in no way differs from that of their ancestors; moreover, it shows great similarity /337/ to the wooden shovel of the ancient Chiriguano (Chervin, p. 216, Fig. 120).

241 412 191 243 Nordenskiöld (9, pp. 30-32), studying the distribution of this cultural element, established that it was peculiar to the Andean zone and the adjoining regions. The Chiriguano shovel nonetheless has a characteristic feature for which we should look in vain on all the specimens found inside the boundaries of the Inca Empire: this is the crescent-shaped handgrip. It corresponds quite precisely to the crutches terminating the oars in use among the tribes of Brazil, Paraguay, and the Guianas and on which the paddler puts his hand flat.

241 412 174 243 The Chiriguano formerly lived in a region rich in rivers and streams, and they probably made use of paddles of this type to go up or down them. Once settled at the foot of the Andes, the resemblance between their former /Fig. 5 appears here/ oars and the shovels they saw in the hands of the Chané or the Chicha must have struck them; and they naturally sought to adapt to the new instruments this detail of structure whose convenience paddling had shown them. Such a hypothesis is not too adventuresome, for do we not have in the Chaco some shovels which have exactly the appearance of oars? (On this subject see the Ashluslay shovel published by Nordenskiöld, 9, p. 30, Fig. 1.)

/338 cont./

243 476 178 The sad state of decline in which the Chiriguano are at present has put an end to collective work, and it is only rarely that sowing is done in common. Each one must provide for his needs without any assistance other than that of his near relatives.

342

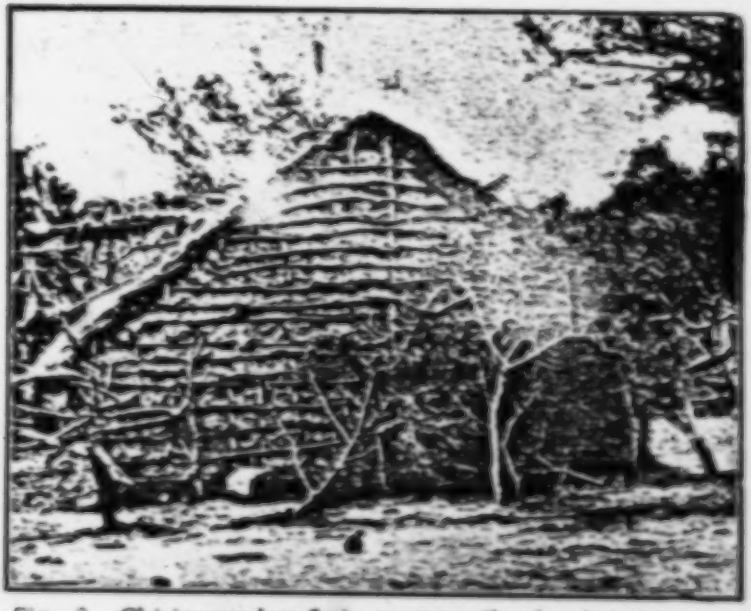


Fig. C. Chiriguano hut (ho), temporarily abandoned by its inhabitants, who have gone to work in the fields. Caipipendí. (Photo. A. M.)

• 241 The Chiriguano cultivate the following plants:
Corn (avati): 11 varieties;
Beans (kumanda): 11 varieties;
Squash (andai and grindaka-wasu): 5 varieties;
Sweet potatoes (yeti): 6 varieties;
Yucca or sweet manioc (mandio) (Manihot utilisima Pohl);
Groundnuts (manduvi);
Pimento /peppers/ (kii) (Capsicum), very rarely cultivated;

/338 cont./

241 Sorghum (riku) (Sorghum sacchariferum) (1):

[262] 1. Sorghum is cultivated only on a very small scale. It is a delicacy that the Chiriguano reserve for children, who suck its stalk.

/339/ Sugar cane;
Melons;
Watermelons (sandias);
Prickly pear (saini) (Opuntia spec.);
Fig trees;
Orange trees (in the missions).

[179] The Chiriguano cultivate only on a very small scale the plants which, like sorghum, sugar cane, fig trees, and orange trees, have been introduced by the Europeans. Of these only melons enjoy general favor.

248 They always devote some parts of their fields to the cultivation of plants of value only for their arts and manufactures. These are: cotton plants (mandiyú), cucurbitaceous plants (iá) which grow on the ground next to their squash and furnish the containers they need, roucou (urukú), which scarcely exists except in the northern part of their habitat, and finally a species of reed (Arundo donax) with which they make the shafts of their arrows.

249 They also plant tobacco (pẽtĭ), but I have never seen any in their fields. According to Nordenskiöld (10, p. 25), its [276] cultivation is insignificant and rare. The Chiriguano are not [123] great smokers, and the numerous packs of cigarettes I took along for them found only a few devotees. Among the Toba, Matako /Mataco/, or Chorotí /Choroti/ my stocks would have been exhausted in the wink of an eye, for these Indians love tobacco more than anything in the world.

276 The use of tobacco among the ancient Chiriguano, as among 756 their ancestors in Paraguay or Brazil, was reserved for the 824 medicine men for their magical operations. Their use made [178] of it a plant endowed with "mystical" virtues, and its

/340 cont./

421 Property is a sacred thing among the Chiriguano, and the nearest relatives cannot dispose of their belongings without their formal consent.

241 115 123 At the time of my stay in Carurutí, I once asked my old friend "Captain" Karnapadyú to take me to his field. He was very

249 407 797 142 291

Fig. 7. Mill for grinding sugar cane at the Ivu mission. (Photo. A. M.)

241 115 [123] touched by /Plate VI appears here/ /341/ the interest that my wish implied and in an instant showed himself ready to do the honors.

His field was about 700 meters from the village on top of one of the cliffs which border the "quebrada" /ravine/ of Carurutí. Access to it was by a steep path across fallen rocks. The entrance [135] to the field was closed by a hedge composed of tree trunks and [417] thorny shrubs which we climbed over with the help of an Indian-style ladder, that is, a thick branch with deep cuts for steps.

[Text continues on p. 74]

/341 cont./

241 115 ladder, that is, a thick branch with deep cuts for steps. Captain Karnapadyú's chacra /cultivated clearing/ was about 200 meters by 70 meters in size. At the edge stood a small wooden hut covered with straw.

The "Captain" began by showing me some manioc plants and had me cross a large square sown exclusively with beans and gourds /citronilles/. The corn fields came next. They were divided in two by a second hedge formed of trunks and thorns. Squash /courges/ grew between the rows of corn. After the maĩzal /field of corn/ followed a second expanse covered with beans, squash, and melons, which Karnapadyú told me belonged to his daughter. Here and there rose several stalks of sorghum. A new corn-field was opposite the

241 532 322 239

Fig. 8. Mask (tovaraanga) carved out of a calabash and provided with hair and eyebrows of horsehair. It was hung up in a planted field where it was serving as a scarecrow. Prov.: Caruruti. (1/5 nat. size.)

241 115 [322] [415] [624] first, and another cabin rose at its edge. In both of these properties the only plants cultivated for their manufacturing value were the cucurbitaceous ones from which the Indians make their cups and bottles.

Next, on the opposite cliff, I visited the chacra of another Indian of the same village. A steeper and more difficult road than the first led to it. The plantation was lower down a hill on which a little hut was perched. These fields were almost solely covered with corn among whose stalks grew squash. As before, the maĩzales were preceded by plantings of beans and squash.

/345 cont./

241 115 The Chiriguano are proud of the extent of their fields. "Captain" Karnapadyú made me walk over all of his, emphasizing its size and the abundance of its produce. Another Chiriguano, after taking me along across all of his plantations, without sparing me one plot of ground, told me as he was bringing me back, with an air at the same time proud and questioning: "Guapo yo" /I am enterprising/. I answered that he was indeed very "guapo." He seemed flattered and happy.

243 593 583 606 [585] The father clears his daughter's field, which represents for her a kind of dowry. The son-in-law must then take care of it, do the sowing and reap the harvest (1). My guide Cipriano complained bitterly about his son-in-law, whose laziness had obliged him to harvest his daughter's corn himself.

1. Corrado (p. 155) states that young married couples live at the expense of their parents and that they do not cultivate any chacras nor build a house before having a child.

Chapter III

Cooking and Food

Food Resources

433 224 198 I have eaten meat only very rarely in Chiriguano villages, and I have never had a chance to taste a piece of game. It is not that this latter has disappeared from the region, exterminated by man, but the Chiriguano do not take the trouble to pursue it. In former days they were enthusiastic hunters, like nearly all the Indians of tropical America. When they were expecting guests for a drinking feast, the men went out into the bush and during 15 to 20 days got a good supply of the flesh of the peccary, deer, nandu, pigeon, armadillo, [251] chuña /a wading bird/, and even parrot. To preserve it they dried it in the sun without salt (Nino, pp. 249-256).

/462 cont./

Chapter X

Masks

532 996 [122] The handsome masks, whose description I shall give further on, are worn during the carnival festivities. Difficulties with the Bolivian authorities kept me from arriving in the Chiriguano villages at the time when they were taking place. When I finally found myself among my Chiriguano friends, they had emptied the last vats of kĩwi and were /463/ in their [126] normal state. Thanks to the closeness of the feast I was able • [241] to collect the masks published here; ordinarily they are destroyed or used in the fields as scarecrows.

115 My host, Mr. Alberto Torrejon, who lives at Ibopeyti on the upper Pilcomayo in an Indian village, gave me some very interesting details about the ceremonies and merrymaking in which he had just participated. I transcribe them as given.

996 995 989 At my approach of any festival, the carnival, for example, the first act consists in causing the souls of the dead to flee. If this precaution is not taken, the widows and relatives of the deceased will have to abstain from taking part. For the purpose of purifying the air, a drum is beaten, and the whole family /Fig. 120 appears here/ which has lost a member weeps and shouts. When the spirits have cleared out, the drum, in a joyful rhythm, gives the signal for merrymaking.

996 The festival is opened by a man and a woman who, with a stick decorated with flowers in hand, advance toward the middle of the square, followed by all the inhabitants in a long chain. When they have arrived at the middle of the area extending between the huts, the couple plants this sign, thus giving the signal for the festival.

[535] The chain breaks up and small groups form to dance in a ring. Their dance consists in advancing and retreating in triple time to the sound of flutes and drums.

/464 cont./

Eyu ikuama	Come and kiss me
Iromireko mi	My little wife
Diyuru emesie	Give me thy mouth
Tuila dipota	I love thee much
Ie songo pe	With my heart
Ime deresa ikavi	Thou hast pretty eyes
Ime diyuro miniray	Thou hast a little mouth
Tuila dipota	I love thee much
Pairamo ayporu deve.	For that I am going to ask for thee.

During this time young or old men with their faces covered by a mask (afiawasu) run here and there, force the people to dance by blows of a stick, play tricks on them, and address jokes to them.

The feast lasts as long as there is kiwi or alcohol. At the moment when it is on the point of ending, a final ceremony takes place. The rite of going out is similar to the rite of entering: the couple who planted the flowery stick tear it from the ground and go out of the village, followed by the afiawasu and all those who took part in the festival. The procession advances to a certain distance from the village to the sound of the flutes and drums. They throw away the masks and throw stones while shouting. The carnival is finished and everyone goes home. Some take along their new wife, for it is at this moment that most marriages are celebrated.

The carnival festivity such as I have just described involves only a few elements borrowed from the half-breeds or creoles, outside of the coincidence of date. This is an ancient feast of a purely agricultural character, which the Chiriguano have acquired the habit of celebrating at the same time as the Bolivian carnival. Besides, the Indians of Ibopeyti are pagans.

The masked men are supposed to represent the spirits of the dead, as their name indicates (afia: spirit; wasu: great). As in the festivals of the Guianas and Central America, they come in numbers /Plate LXXXVI appears here/ /465/ to insure for their

[Text continues on p. 329]

Chané SF 8
Arawakan Indians SR6

C 796 241 [191] /465 cont./ descendants or relatives the fertility of the fields and the abundance of the future harvest. These masked festivals have their counterpart in the famous ceremonies of the populations of the Negro River, the details of which Koch-Grünberg has made known to us. Besides, it is probable that the Chiriguano borrowed these ceremonies, and especially the masks, from the Chané. It is the racial brothers of the Chané, the Arawak of the Negro River, who celebrate these festivals with the most splendor. The Chané of the Parapitî still accord to these ancient rites more importance than the Chiriguano, and their masks crowned with immense tufts of feathers are, it appears, more sumptuous than those of their old Guarani enemies.

In the missions the carnival has lost its purely pagan significance and has become contaminated with usages which the Chiriguano have borrowed from the half-breeds. Nino (pp. 267-270) gives a good description of them, of which I shall summarize the principal features.

The festival is directed by a personage wearing an old-man mask. He stops at each corner of the square, recommending peace and harmony to all.

Then they give themselves over to different games: masked personages scatter bean pods or corn bran upon the dancers.

Young men, masked but almost entirely naked, daub themselves with mud and try to soil all those who have new garments. These two customs can have only a Bolivian origin.

Individuals who are also masked mime a combat between a jaguar and a bull which is finally put to death by a fanciful butcher. Then they pass on to the pleasures of the dance. "The dancers form a large circle by joining hands and dance thus three times. Three times also they squat down, and three more times they pass under the extended arms of a couple of the same circle, and finally the same number of times they press against one another, forming a big mass, their faces turned toward the outside and their hands folded. They remain in this position until another couple dances around them. These do not hold each other by the hand. The man chases the woman and tries to grab her. She avoids him and goes to hide in the middle of the others."

2:Métraux E-5 (1929) 1948 SF10 Chiriguano SF10
Chaco SF8

The migrations, wars, and the religious conversion of the *Chiriguano* have been the subjects of many historical monographs. The most important of these are by Corrado (1884), Serrano y Sanz (1898), Domínguez (1918), Camilla (1929 a, and b), Métraux (1930 b), Cané (1925), Moreno (1929), and Finot (1939). The Jesuit missionary work among the *Chiriguano* has been described by Lozano (1941) and Muriel (1918).

CULTURE

SUBSISTENCE ACTIVITIES

As today *Chiriguano* and *Chané* share in the same culture, the following data may apply to both tribes.

Farming.—The *Chané*, conquered by the *Chiriguano*, were proficient farmers who, though practicing a tropical type of agriculture, were probably acquainted with many of the methods of cultivation of the Andean area. The *Chiriguano* adopted their traditions. The new habitat of the *Chiriguano* did not offer the same resources for hunting and fishing as had their homeland. Therefore, these Indians depend on farming to a larger extent than any other *Tupi-Guarani tribe*. The basis of their livelihood is maize, of which they have 11 varieties, all related to those of Paraguay. Then follow in order of importance: Pumpkins, beans (11 varieties), sweet potatoes, sweet manioc, peanuts, and some Barbary figs (*Opuntia* sp). Sweet potatoes were grown on a large scale by the *Chané* of the Parapeti River.

These Indians also raise cotton, tobacco, urucú, and, in the Parapeti region, reeds for arrow shafts (*Arundo donax*). Plants of the Old World adopted by the *Chiriguano* include melons, watermelons, oranges, sugarcane, and sorghum.

Chiriguano men clear the fields and surround them with a tall fence as a protection against the intrusion of wild or domesticated animals, a task which is considered to be particularly strenuous. They also till the soil, but at harvest time they are assisted by the women and children. The latter, armed with slings, drive away the parakeets and other birds which prey on the crops. Nordenskiöld (1912, p. 183) observed that among the *Chané* of the Izíyuro region, large maize fields were tended by men, while pumpkins and beans were raised by the women.

Collecting wild food.—When their crops fail, the *Chiriguano* subsist on the same species of pods and fruits as those collected by the Chaco Indians: Algarrobo, tuna, mistol, carnaúba, and other plant foods.

Hunting.—Hunting is a very secondary economic activity, at least in modern times. Peccaries, which are the main game animal, are hunted with specially trained dogs and killed with bows and arrows or with clubs. Rheas, which are abundant in the Chaco plains, are caught with bolas. Pigeons are captured with clap nets. Special arrows with two points are used for hunting yuca birds (*Penelope* sp.).

/6 cont./

133 comfortable to go down as to go up, if an occasional short
• [241] section be excepted. The hill of Padilla attracts the attention of
[361] all: there grow and ripen well both potatoes and maize, and
the hill is sprinkled on both sides with houses of all sizes.
From January to May the fields give it a quite picturesque and
pleasing appearance as it rises some 2,360 meters above sea
level, for which reason no doubt it is unfurnished with the trees
which are found nearby growing exuberantly on the plain toward
Monteagudo along the rivulet called Limón.

Next come the hills called Huacaqui, Bartolo, and
Casadero, the first two found on the right bank and the
latter on the left bank of the Acero River, which touches the
slopes of the last named; the three have no peculiarity, only
that they are tree covered, rather high, and the road through
[136] them is very bad. Casadero Hill abounds in jaguars, and it
is the same hill which must be crossed or climbed in order to
go from San Juan del Piray to San Pablo de Huacareta; before
one climbs this hill near San Juan, there is another small one
called Ñañolama, which attracts the attention of all because
it is very narrow, low, and straight; it is a straight line which
rises in the middle of the valley and continues without ending
to the southeast; the Piray and Parapiti rivers wash the base
of Ñañolama.

/7/ Monteagudo has a somewhat irregular plain, but it
is not interrupted by hills until three leagues away, that is, at
the Parapiti River in Matara, where there is another hill re-
nowned only because it is a road and an extremely bad one.
The Parapiti River bathes it at its base, and along the river
itself the way is very boldly opened through the hard rock,
forming a waterfall there; this same hill must be climbed to
leave Ingre Canton, as well as Iglombe, where the passage
is also quite rough.

133 From Matara to Ivo there are hills and rises of little im-
123 portance, if one makes an exception of the hills of Itirati,
648 Saavaveta, and Incahuasi, which last separates the province
of Acero from that of Cordillera; on Incahuasi there are an
infinite number of ruins of fortresses and houses, which, ac-
cording to what they say and the name Incahuasi, "Inca's House,"
was an encampment of Quechua Indians, when, at the orders

4: Nino--IN M-3 (1889-1911) 1912 SF10 Chiriquano SF10

/9 cont./

133 At this point the river disappears completely from the
[312 month of June to December or January, forcing the farmers
234] to make great excavations in its bed in order to be able to
water their livestock; they have to go down to five meters
in certain places. The course of the new dry river is easily
seen, because in the season of great floods it leaves on the
bank all the trash which it drags along and in its bed all the
sand; the waters reappear to form the San Miguel River in the
province of Veraguas.

133 /10/ The benefit that agriculture and cattle raising draws
312 from the Parapiti is indisputable; without it the existence of
Parapiti and Ismo customs would be almost impossible. All
the wealth of both areas would disappear, there would be no
livestock, sugar plantations, or rice fields as there are now
on both banks, which lend themselves marvelously to the open-
ing of canals and irrigating the sugar-cane fields which abound
there. Nevertheless, the extraordinary floods of certain years
do much damage, making plantations and their equipment dis-
appear almost completely.

134 This river contains few fish; there are only bagre and shad
and others of little value; the big dorados do not exist and there
are only a few small ones in its tributary, the Pizay River, but
strangely they do not enter the Parapiti; at the confluence they
go back. Below the San Francisco Mission the fish disappear,
because the water diminishes until it almost all disappears near
Mariqui.

• 24 In Ismo maize is planted in the month of June in order to
21 harvest the crop before the beginning of the big floods which
312 inundate it all, and during the rainy season they are content to
sow frijoles, gourds, melons, and watermelon far from the
riverbed, but fruit is not always produced, since the region is
rather arid. The waters of this river are quite sweet, and this
must be one reason why agriculture is very vigorous on its banks,
as any traveler can see.

/14 cont./

341 342 344 The closer the traveler gets to the Gran Chaco, the less water and the less fertility he finds: the very fields of Yvu are patent proof, for crops are rarely abundant there. When the rains are torrential in other sections, they are sparse in Yvu; the farther to the west one travels from Aguaragüe, the more fertile is the land, because the hills and hillocks are more frequent and higher, water more abundant, and consequently the land more moist, which is necessary for agricultural production.

The fields are suitable for raising cows and horses, for the multiplication of sheep and pigs: the year when it fails to rain, however, there is lack of food for the livestock, as well as lack of water, the suffering is great, and numbers die near the waters which are found at some distance from the spots where there is feed, such as the slopes of the hills and the tops of the hillocks, abounding in tree leaves.

139 The countryside is clothed with grasses in the summer, but the region begins to turn beautiful in the spring and even earlier. The vigorous woods, dry and leafless during the cold months, begin to dress in verdant foliage at the beginning of the month of September, and in a few days nature is rejuvenated. Then it is very lovely to contemplate from some slight rise a broad pampa where there are carob trees, groves of catalpas or lapachos, the first green, the second red, and the third yellow and purple.

241 182 [132] 333 The territory is productive only in the rainy season, because the Chiriguano in general will not take the trouble to put in a good irrigation ditch when he can; he waits for it all from the high heavens. Miracles could have been worked on the banks of the rivers in times past; today it is difficult because they are very few and, like their grandparents, are satisfied with maize, a little sugar cane, and other delicacies, like sweet potatoes or batatas, mandioca, and peanuts.

241 [221] Large-scale planting begins at the end of November or the beginning of December, after the country has been watered by two or three abundant rains. The maize grows very high and, when there is no lack of water, produces two or three ears on each stalk. The frijoles produce three crops. The sugar cane

/14 cont./

241 grows up to two meters and even more, the mandioca /15/ produces one arroba per plant, and the sweet potato even more because a single plant can spread and extend eight or ten meters, being productive in every root put in the ground, just so it is suitably covered with earth there.

311 The fertility of the region which I describe cannot be doubted, but the inhabitants do not cultivate it. If in this area there were persons who liked to work, the land would produce more; for this is of no use to mestizo people either, since he who was a peon in Sucre or Tarija wants to be a gentleman here because he is not a Chiriguano, as a result of which the very banks of the rivers, those shores of the Parapiti and Río Grande which appear to be beckoning the farmer, remain almost uncultivated. Ticucha Canton is another area where a colony of foreigners would work miracles, planting vineyards and fruit trees and so many other products that could be developed there; the same could be said of so many other sites.

[245] It seems that the grape does not grow in certain places, but this is because it has not been tried. Not long ago the missionary padre of San Antonio del Parapiti planted some 200 vine stocks. Who would believe it? Within six months some plants yielded quite ripe fruit, and the plants developed in an extraordinary fashion. In nearly all the missions there is cultivation of the vineyard and in Charagua it is on a large scale through the work of foreigners; therefore what is needed are thinking men and good farmers in order to make these beautiful lands productive, especially along the river banks, where sugar-cane plantations, banana plantations, coffee fields, vineyards, and so many other things that are productive here could be established.

433 241 From the foot of Padilla Hill the forest is very vigorous and continues so to the east until it ends at Aguaragüe. Fig trees yield with little cultivation, the nopal with none at all since it flourishes on hillocks and hills and, such an agreeable and refreshing fruit, is the principal occupant. Chirimoyas, oranges, lemons, and guavas also grow, as well as onions and

/15 cont./

433 sweet potatoes; cotton grows everywhere, tomatoes and garlic
241 mature the year round, and in the gardens lettuce, cabbage, cauliflower, and peppers create the beauty of a spot, without taking into account the gastronomic advantages. Even the peach trees would yield fine fruits, but they suffer much from the black butterflies, which damage them before they ripen.

Without work the land will produce only briars and brambles, and /16/ as long as there are only Chiriguano and [157] cattle ranches here, progress will be slight and the population [181] sparse, because the Indian has no ambition, and life is rela- [185] tively inexpensive; the whites prosper by taking good care of their livestock, and no greater fertility can be obtained from the land because the holdings of a few families are very extensive and do not facilitate the residence of numerous renters, who do not always give good results nor do all come or ask to rent for farming alone. All of them want to get rich easily and quickly, and the best way is to raise stock, the result of which is that great areas of briars and brambles exist.

Flora

13 In the course of this hasty description I have noted that in Chiriguano country atmospheric changes are very sudden, but it has been noted that the region is quite fertile when it is watered by the rains or by irrigation ditches, because small rivers are plentiful, particularly in the mountainous region, and an occasional river of some size bathes the adjacent territories with its abundant waters.

There are many hills, pampas, and valleys, and for this reason every kind of climate may be found in this territory. [137] There are in fact oppressive heat, intense cold, and a temperate climate, thus making it possible to find land for every product from the lowly gourd to the savory chirimoya, from the ubiquitous maize to wheat, rice, and barley, from the mulberry /mora/, which grows spontaneously, to the rich grape, whose bunches reach weights of three and four libras.

/33/

*136 *825 The large armadillo is slightly less than one vara long: its burrow corresponds to its size and even more, and not infrequently the wild boar or peccary, when chased by hunters and dogs, finds a safe refuge in these holes. The meat of the large armadillo is not so good for civilized people, but that of the others is; I have eaten it many times. The fat softens the tumors and gristle in it. Armadillos feed on worms. Nevertheless, the true armadillo is harmful to the maize fields [241] when they are newly planted, because it searches out and eats the seeds; it is also very harmful in melon patches, of which it scarcely leaves a slender shred; when it gets into the melons, it does not allow any to ripen. The Indians know well [224] where the armadillo abounds; as soon as they finish planting the maize, on nights with a moon or without it, they go there and, helped by hunting dogs, kill them.

COBAYO /guinea pig/. -- This little animal is innocuous and plentiful everywhere. Its places are the fences, where it [262] hides with ease. It is similar to large rats without a tail; [237] its meat is very tasty, and bags in which smokers store tobacco, tinder, and flint are made from its skin. When it sees a hunter [224] or believes that danger is near, it hastens to hide in the thickness of the fences, but when the hunter hides, it is not long in coming out again in search of food, morning and evening, and then it is easy to kill with arrow or shotgun. The Chiriguano call it "Aperea." [231] There is another sort of multicolored guinea pig of the same size as the previous one, but this one is domesticated. The color of the true guinea pig is light brown.

CONEJO /rabbit/. A quadruped in the wild state, native to America, it is the size of a large cat. Its color is a shaded [224] white, and here there are none of any other color, but there [262] are in other parts of South America; its meat is delicious, and the Indians like it and hunt it; its form is the same as that of the domestic rabbit, and in the Chiriguano language it is called "Tapiti."

/70 cont./

174 idleness and laziness and in indolence and are content with what nature provides for them to live on and subsist: this is the practice of the savages to the north of Santa Cruz, thus the Toba, Mataco, Choriti, and others who do not bother with planting and are content with only hunting, fishing, roots, and wild fruits, which, when they begin to turn yellow, are greeted by the Toba and Mataco with the "Pimpin," a kind of small drum, so that they may mature faster and better.

174 But the Chiriguano, in spite of being indolent, a recent émigré, like his neighbors, is not so much so as the other tribes, since he joined the Carious. In addition to liking to fish and hunt, he does not fail to make his plantings of maize on a large scale, where he uses his energies in order to profit from his sweat later by converting it into "Atipûi," parched maize, "Atiruru," mote or boiled maize, "Aticûi," meal, "Muyape," bread, "Cangûi," or chicha, etc., dishes that the Toba and others know only in the house or larder of the Chiriguano. In order to obtain this class of foodstuffs, the banks of the Pilcomayo were not sufficient for a very large tribe; in addition, the other tribes which were hidden in the woods along that stretch must have devastated their fields, or their owners must have been in a continual state of uneasiness. Neither could they have obtained it on the pampas of the Gran Chaco, because the cooling action of the rains is scarce there, and, moreover, the soil in many places is like an immense sieve because of the holes made by the quiriquinchos /armadillos/, balled armadillos, and others of the species, which nest there and have built their subterranean towns (1).

1. The Toba began to plant maize and beans when they came under the control of the Franciscan fathers at the San Francisco dey Pilcomayo Mission, now Villamontes; today they plant very little.

/70 cont./

174 241 311 Consequently it was very natural that the race which was emigrating from Paraguay should seek out for its needs better lands which would permit it to make good use of its natural inclination to cultivate "Abati," maize, "Gilindaca," gourds, and "Cumanda," beans, because from the names that they give to all of these vegetables, it can be deduced that they did not get to know them after the discovery of America, but long before: and the same is true for the domestic animals, "Yaimba," dog, "Uru," /71/ chicken, "Minta," cat. What is certain is that the Chiriguano race has been distinguished and is distinguished from the others which still remain in the savage state, and the Toba, as well as the Mataco and the Choroti, regard the Chiriguano as nobles and masters, and they serve them in exchange for maize and other things, and there has never been a natural marriage involving a Chiriguano man or woman with the tribes named (1).

174 248 328

1. The Toba are more intelligent and more easily reduced than the Matacos; the latter were also exposed to the missionaries of San Antonio del Pilcomayo, located on its right bank.

The Toba have generally assisted their masters in wars and have lived for long periods among them, especially in the time of good and abundant crops. They did this before the missionaries opened Cuevo and Ivo to trade with the founding of the Santa Rosa and San Buenaventura missions, and they still do in the Franciscan missions of Macharetí, Tigüipa, and Tariari, because they are near these tribes.

174 169 The places that the Chiriguano selected for their residence after the migration were the mountainous one and the one visited by frequent rains, necessary so as not to lose the fruit of their labor, and in fact we do not see this race settled in places away from the mountain range, nor in impenetrable forest, good only for those tribes in a state of

/76 cont./

When experience showed them that they could settle in the regions which they occupy today because the harvests were certain, they made their homes there and, when invaded, defended the territory at all costs, as has been seen. The region, as was seen in the first chapter, is certainly very fertile; when it is irrigated by rain, it produces every type of cereal; maize matures exuberantly, and the crops are splendid with little labor. If the fields are kept free of weeds with a couple of weeding hooks and there is no lack of rain, the Chiriguano can sing all year around the big chicha bowl in the company of his friends.

But if rain is scarce, the crops are generally lost, and then the Chiriguano suffers, digs roots for his food, and sells everything he has, even his trousers and his wife's new tipoy, in order to support his poor family miserably. In times of scarcity the Indian plants with considerable hope a small patch where it is damp, such as around a lake or /77/ along some stream; plantings of this type are called socorro /succor/, and in fact they are, when roots can scarcely be found. Oh a few green gourd leaves at this time are like syrup in the Chiriguano's mouth! Poor Indian!

Language

By what has already been related it can easily be understood that the Chiriguano are descendants of the Guaraní of Paraguay; thus the Chiriguano language is very analogous to Guaraní, as well as the Guarayo language, and it can be stated as a fact that both the Guarayo and the Chiriguano languages have the same relationship to Guaraní as that which exists among the Spanish, French, and Italian languages with respect to the Latin language, which is their mother (1).

1. The Chiriguano language has very few accented words; in Guaraní they are abundant. For example, "abati," maize,

/181 cont./

524 gallery two cords, tying at the ends a piece of cowhide 80 centimeters long by 30 in width, hanging about 60 centimeters above the ground. This is called Sabiuca, swing, and here the little boys and girls swing and rock.

562 Women sit on the ground in their houses and observe the
524 same custom when they go visiting. The man waits until he
526 is told where he should sit and always receives the best seat.
516 The woman does not wait; she knows her place; she arrives, does not greet anyone, leaves her bundle in a corner, if she has one, and then squats down in such a way that from near or far many women squatting like this look like so many carronades /camaretas/ ready to go off.

Matés

462 In the furnishings of Chiriguano houses a preferred place
241 is occupied by the matés, made of gourds divided vertically
415 through the middle. This is man's work; he plants them and
322 cultivates them in his field, and when they are mature they are brought to the house where they are allowed to dry in the shade and also in the sun. Some three months are needed for this or even more, depending on the season. Nevertheless, they are watched throughout to see whether a fingernail will penetrate the skin. When the fingernail will not penetrate, the gourds are ripe. Then they remove the first skin, split them, extract and completely remove the pulp, keep the seeds for the new planting, and, when they are clean, they let them dry for a few days.

462 They are put in a separate place, and a second operation
415 begins. With his Chiriguano patience, with a knife or other
531 instrument, the Indian begins to engrave whatever figures occur to him, such as tree branches, circles with grains of sand, squares, figures of jaguars, doves, lizards, dogs, chickens,

/237 cont./

648 464 466 It can be said with all certainty that the only laborer in the four provinces of Azero, Cordillera, O'Connor, and Gran Chaco is the Chiriguano, who is found even beyond Santa Cruz de la Sierra, where he also works, taken there by the authorities or by the owners of the lands, which they bought in ancient times for a trifle (1).

[425]

1. If one is to credit what the Indians say, in some places land was acquired by barefaced trickery /leva raida/ at the time of Ferdinand VII; in other places, for three or four arrobas of cheese, and in the last ones, for a cow, a poncho, a few varas of cloth, or a few bottles of liquor given to the cacique.

178 [169] Today the Chiriguano, very abject, in many places suffers in resignation what, according to the story, he did not want yesterday; in other places he is migrating the better part of the time, that is to say, when his presence is necessary for the general planting, to which of necessity the old people must devote themselves if they want to live without dying of hunger and in order to be able to welcome the migrants when they return for a few days to show off their new clothing, their work from other regions, to sell it immediately for very little, to slaughter some cattle of their own or of their elders, and to go back at once without even saying good-by.

Property Rights

648 [241] The object of the present chapter is to describe the method of cultivating the land when the Indians lived alone in the country, before the whites had moved in among them; now they scarcely give them /238/ room to do their planting as best they can. Nonetheless, since they keep them continually occupied, food and clothing are never lacking to anybody in a Christian's house, where the Indian gets them

177 648

/238 cont./

177
648 for himself, for his children, and for his wife (1).

1. Perhaps without intending to do so, the whites have done and are doing a work of charity for the Indian, that of moralizing him somewhat through work, during which he neither gets drunk nor thinks of trifles, etc. Only in some places a little moderation is needed in order not to discourage him.

241
773
776 It was also the Aguara-Tunpa who taught the Chiriguano the cultivation of land, since, seeing that he had not been able to remedy his misery and needs by handing over the bows and arrows, he once again visited his poor hut, and seeing him thin and emaciated, he gave him all kinds of seed so that he might make them bear fruit, teaching him the method of burying them and advising him also of the way and the time for pulling out the weeds with a wooden, because he would have seemed bad before his enemy and before the Indian himself if he had not completed his philanthropical work, after criticizing so much the true friend of Chiriguano humanity (2).

2. The Aguara-Tunpa, For God, did not tell him that the seeds could be eaten right away, because in that way they would have been lost immediately. After they had germinated, he advised that when they were ripe, he could have food for himself and for his family.

423 Every Chiriguano has a small plot of cultivated land, sufficient for himself and for his family. Nobody had previously entered the area in which the Indians live, so that nobody disputed their property rights, as they should not be disputed today, because they are the owners ab immemorabili, and no individual could have sold what belonged to the community.

/238 cont./

423 311 To acquire possesion of a small plot of land, the Chiriguano selects beforehand the part that he likes best in the region, which he judges to be wet enough because it is on the slopes of ridges or hills or because water collects there in the rainy season. Naturally, the site which he intends to cultivate must have no signs of previous cultivation, because if there were any the owner or his descendants, even though at some distance, would immediately place a claim before the competent authority, the cacique.

423 [241] If the plot has not been tilled, he can be sure of not being disturbed, and before the rainy season ends he plants on it anything /239/ which will be visible, such as the Gilindacaguasu, a large gourd which spreads a great deal, invades everything, and is not easily strangled by weeds. Another way to acquire property is to break all the bushes around the site, or, finally, to make cuts with his ax on the largest trees.

No one can lay claim to a place that belongs to the community of the Indians, where anyone has worked, and the one 241 who made the prior signs is regarded as the owner. The rainy season passes, the cold comes and dries up the grass and the leaves of the trees: before August ends, the Indian sets fire to the whole new plot, which consumes the grass and the brambles and makes useless the larger trees. All the ashes [461] that are left are fertilizer for the land, and the fire has destroyed all the seeds of the weeds and brush, so that the first planting which is done on the new plot is almost free of weeds, which saves labor for the lazy Chiriguano (1).

1. The old Indians still do some work in order not to have many weeds in their fields, but the modern ones are little concerned about it now in many areas. Moreover, the cattle do not leave any time, invading everything and eating up the pasturage in a short time. It is very sensible to prohibit the burning of the fields after the harvest.

/239 cont./

Old Method of Farming

241 In planting the fields which are already old, they use the same method of applying fire to the weeds and stubble that are left after the harvest; this method is even coming to be practiced by the whites and the mestizos. As far as fertilizing the land, the Chiriguano does not worry about it, because the lands are virgin and the Indian hardly plants maize on a large scale, and, if it rains regularly until the grain has become hard, the crop is abundant and the farmer has enough to eat and an abundance of chicha to drink, which is what he wants.

412 Formerly the ava had nothing but a wooden shovel and a stone ax, which is hard to find today. He obtained his livelihood with these insignificant tools: the ax served him for cutting trees and bushes and the spade for pulling up all the grass and brush. The spade was like those used by bakers for [324] [239] putting bread in the oven; it was of soto wood and was attached to a rather long handle with bejuco vines or strips of tuburuchi bark; the handle was always long, because the Indian /240/ neither knew nor does he now know how to bend his back at his farm chores; these spades were also made from the shoulder blade of cattle, horses, or asses (1).

000

1. Baron don Erland Nordenskiold, in addition to the pots from various regions of Bolivia, sent to the Swedish museum pots made by the Chiriguano, wooden spades, and stone axes.

241 Planting was usually done in the month of November, [242] after the ground had received at least two rains. Then the Indian would first destroy with his spade the small amount of grass that had come up, and then he would notify his friends and relatives so that they might help him to plant on [494] the day indicated. The cacique took part in the general [534] planting, ordering that those under him should help one another; thus, early on the said day, at daybreak, they would

/240 cont./

241 [476] [534] go to the plot, waking each other up with shouts, whistles, and by means of the Huacananti, cow's horn.

The method of planting is very simple. When the land is soft, the planter makes a small hole with his spade, using two or three blows, then pushes the spade forward, throws in two or three grains of seed and covers them. Then, without moving he makes another hole to the right, horizontal to the first, and a third to the left, performing the same operation as in the first, after which he takes a step and continues as before until he finishes. With many working, the planting of a plot is soon finished.

241 461 512 The Indian does not work beyond midday, and he tries to finish the job before leaving it in order not to return; therefore that the work sometimes lasts until two in the afternoon. Then the owner and his companions stop, return to the town, where they are awaited with plenty of food and chicha, which the former has ordered prepared, if the previous harvests were abundant (2).

[273] [262] 2. In any case, if there were a lack of chicha, because of previous scarcity, and mead made from algarrobas, the housewife should still wait for the planters with food mixed with some meat and plenty of chili peppers.

241 476 They formerly continued in this fashion until the planting of a tribe was completed; one day on one's own plot and another on that of a companion, and even the cacique did the same; today this is difficult to manage, because now they are not so close. Nevertheless, in times of scarcity, if someone prepares chicha for those who may wish to help him in planting or weeding, they leave or refuse money for a few mates or /241/ glasses of this much desired liquor. Even the whites get peons more easily this way.

/241 cont./

Modern Farming and Seeds

241 177 [407] Today planting with the spade is disappearing, and if this tool is necessary for weeding, an iron one has been substituted. The plow has become general, as have the yoke and oxen, and in the missions even boys of 12 break in oxen two and a half years old. They first do the planting for the mission, then for themselves and their fathers, and finally they help those who have no sons: the missionary provides them with young oxen, plowshares, and even halters when they are very poor.

The neophytes in most of the Potosí missions have learned to perfection this new method of farming, and they are so advanced that they are competitive with and even superior to many mestizo farmers. [868] [409] The older ones teach the younger ones, fathers teach their sons, and the latter as well as the former manufacture plow and yoke out of selected wood with all the perfection that these implements require. [231] It is satisfying to see upon a farm 40 or 50 yokes of oxen, directed and driven by young men and boys who yesterday were like their grandparents! 46 The whites themselves do their planting on a large scale, aided by these Chiriguano, who receive in exchange double daily wages (1).

1. A peon plowman is not obliged to bring oxen: it is the white who waits for him with the yoke hitched. If a peon brings his own, he earns up to triple daily wages, because they are worth exactly three strong peons, the two oxen and the man who drives them. Thus it is not much to pay him triple.

243 222 Today it seems to me that there must not be another country where the different types of maize thrive better. This is the principal element, the daily food, not only of the Chiriguano tribe, but of all those who inhabit most of Bolivia. Here in particular, when there is no harvest, its lack is greatly felt by whites and blacks, that is to say, by mestizos and by Chiriguanos.

/344 cont./

252 262 Gourds are eaten boiled, roasted, and in broth: the seed is enjoyed when roasted with maize meal, parched maize, or beans. They also eat them as broth, which they call Gõindaca mi quira, or grease of the gourd, to which they add chili pepper and salt, just as they do with beans cooked in ollas with the whole pod, which they call Soyiriqua.

•241 If the Chiriguano manages to plant a little maize beans /poroto/, and gourds, he is content and stops planting other, less important seeds. Few plant Yeti, sweet potato, Mandiporopi, mandioca, Tacuaneé, sugar cane, and Mendovi, peanut. They all plant watermelons and other melons: many plant figs and tunas, or nopal, and few cultivate orange trees, because this Indian has little patience for waiting on the ingratitude of certain plants which require much care and are very slow in yielding fruit (2).

[192] [199] 2. Names for watermelon /sandía/ and melon /melón/ do not exist in the Chiriguano language, which indicates that these fruits were introduced by the whites, from whom the Indians got them.

222 245 262 The nopal is very abundant in this area, rising to some three or four meters: its fruit is very exquisite, as everyone knows. Its cultivation is nil: it is enough to pluck off a branch of the main plant and bury it halfway, and its sweet fruit will ripen from the second year on. It is the plant that the Chiriguano value most.

245 Even the fig tree, which also needs little care, is cultivated. They call it Iva, as well as calling the nopal Saini, and both plants seem to be native, because they grow in hot places, and the name indicates that they have always had them. The fig tree requires more cultivation than the nopal, but this is relatively insignificant: they pull off a branch, plant it during the rainy season, and let it grow fully without pulling off any shoots (3).

439 3. Whites who live among the Indians are

/344 cont./

439 occupied in other, more lucrative trades: they rarely plant fig trees and sapal, and this benefits the Chiriguano, who sells both fruits, receiving money, meat, or charqui from the white man.

•241 When any of this planting is done, all the desire of the Chiriguano is that it yields: he fervently beseeches the favor of heaven, /345/ or the sorcerers, masters of the rain, that there may not be a lack of the necessary moisture, and he, with his own hands, sees to it that the planting is quite free of all weeds.

Use of the Ripe Produce

262 252 If the weather is favorable and the Indian has taken care of the planting, the reward of his little bit of sweat will not make him wait long. In exactly three months, or even before, he can already begin to savor Abatíguai, tender maize, which the mestizos call choclo. The first of these ears are eaten roasted and almost never boiled, because they say that prepared in the latter fashion they are tasteless. They go on to say that roasted choclo must be cooked only a little in order not to lose its ability to ferment, and if it is roasted under ashes with the whole husk, it is almost as sweet as sugar. How well, dear reader, do my Indians know what is good for the body, and how they know the way to get fat and what is most pleasing to the palate! They are good gourmets despite their poverty! It seems that they belong to the abdominals described by Father Saj.

When the choclo is somewhat more mature, they eat it with more pleasure, and then they also very nicely prepare tumbérai, humitas/small cakes made of tender maize and sugar/. The method is very simple: instead of a knife or spoon to pull off the kernels, the young Chiriguano girl or old woman, pretty or ugly, with good teeth or bad ones, uses them instead of a mortar and pestle to grind it: it is done with the teeth very

4: Nimu--346 M-2 (1880-1911) 1917 SF10 Chiriguano SF10

/356 cont./

those of certain peoples who, without going further, are close to those who know nothing about civilization, whose morals, compared with those of these unfortunates, are far lower because of their refinement (1).

1. Some moderns would have civilization consist of purely material education without attending to the yearnings of the heart; for them it is all the same whether man dresses or goes naked.

357 In the course of this chapter my readers will learn that I can be little mistaken in what I stated above, and they will also learn that even the Chiriguano have fiestas, which they call Arete, which /358/ are celebrated neither for saints, emperors, nor kings, nor are they celebrated in a disorderly fashion, nor do they allow themselves to be disemboweled by a bull, as sometimes happens to mestizos or Spaniards; much less are they celebrated for open abandonment to luxury; they are celebrated only in order to drink and stuff oneself, and to enjoy the fruit of the labor involved in the planting of the maize, to have a few days of general rejoicing, to drink, in sum, like good brothers (1).

358 1. In the general drinking a certain immorality in their words is to be lamented, and they sometimes test their strength and valor with pugilism.

Before the Fiesta

359 Before the white race entered the region, cattle were almost unknown and the few that the Indians had were tame, nor had they taken to their hearts the desire for maize as they do now; thus the Chiriguano easily did his planting and weeding in less than a month, leaving the rest to God, but I speak badly, to the good storms, the sun, and the rain. Today if he does not put a fence around his planting, the cattle of the Christians and the Indians very soon reach the crop, and a little carelessness is

/256 cont./

241 enough for this. Although there are good fences, there are better
231 and braver bulls or calves, who with their horns are capable of
177 opening iron gates, opening the way to all their females, whom they then call with much affection with their prolonged bellows (2).

> 2. The harmful cattle even become ferocious: if a man alone tries to chase them out of the field without the help of good dogs, he will be charged.

241 The harvest maize for the Chiriguano the time of the year
221 that he calls Mbaepiro, which literally means a dry thing or things, and everyone will understand that this corresponds to autumn, in which season the trees and every bush take off their beauty and raiment. Men and women then are busy carrying in
[343] what the land has produced for them: the maize crop is kept in the plot itself, in a kind of house of sticks called Abatío, maize house, and the woman little by little, as needed, brings it to the town for the daily meal and for the preparation of chicha (3).

> 3. If the harvest of gourds is not abundant, they put them on the maize in the same shed, if they do not build another; the bean crop is brought immediately to the tribe or town.

529 /257/ After this the Chiriguano spends his time in idleness, drinking here today, there tomorrow, visiting with some, playing with others, enjoying, in sum, with almost no work, a better
[221] life than the greatest ruler in the world. The harvest is cut between May and June, and after it the libations in honor of the belly god begin. As the desire to drink is extraordinary, before having the general libation, the families, one by one, begin to make a small quantity of chicha to be drunk among a few friends and relatives.

shall see that the methods of fishing differ somewhat in the different rivers. At the Rio Pilcomayo the Indians must always have found a good supply of food. As many Chiriguano live by very insignificant streams they never have the opportunity of fishing. The Chané all live in places where they are able to procure fish during some part of the year at least.

Big game is scarce in the land of the Chiriguano and Chané. Nor are these Indians keen hunters. One seldom sees game that has been killed by them in their huts. The great flocks of fat pigeons that settle in their fields are for the most part left unmolested.

As we shall see in the following the Chiriguano and Chané live mostly by tilling the ground. Owing to the comparative dryness of their land maize is cultivated more than anything else. It is the ease with which this plant can be grown here, that makes the land of the Chiriguano and Chané a good land to dwell in.

The fruit of the carob-tree (algarrobo) is the most important wild fruit. Probably no careful study has ever been made of the climatic conditions of the Chiriguano and Chané country. It is situated in the tropics, north of the tropic of Capricorn and the traveller there of course suffers more from heat than cold. In May and June especially, however, when there is a strong south wind, it is agreeable to have a well built house, warm clothes and a snug bed. The rains begin in December and leave off in April or May. It sometimes happens that there is little or no rain and then the crops are a failure. They are often destroyed by grasshoppers.

Schmeltz 8-4,1 (1909-1910, 1913) 1921
1911 Chirigoano 1913
Chano 1913

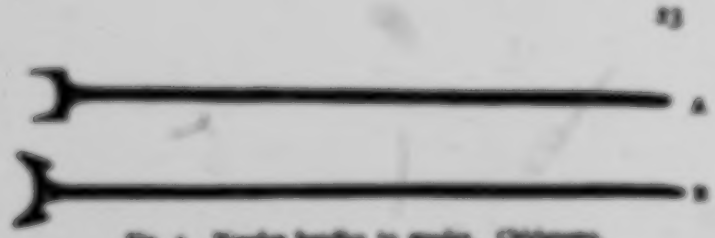


Fig. 1. Wooden handles to spades. Chirigoano.
A Private collection. B — R. M. S. Ms.

III.

Tillage and tillage implements.

Vegetable food is of great importance to the majority of Indians. This is most specially so with the Chirigoano and Chané. To the former, as well as to those of the latter tribe who dwell on the Rio Itiyuro, maize is of extraordinary importance. The Chirigoano and Chané belong to Wissler's »maize-area« or »area of intensive agriculture«. Wissler divides S. America into three great food areas: area of intensive agriculture, maize area, and guenoco area. Another division would be more correct, viz. —

1) Area of intensive agriculture.
2) Area of maize and fishing.
3) Area of wild seeds and fishing. 4) Cross Chaco.
4) Guenoco area.

There will, of course, be in addition a number of small areas with special conditions of life, as in the extreme south of S. America.

The Chirigoano grow 11 kinds of maize[1]), 11 varieties of beans[1]), 11 kinds of calabashes[1]), of which 3 are edible, sweet potatoes, manioca, sugar-cane, maní, arrow, tobacco,

[1]) According to Stow Pp. 141 ....

Schmidt-Bibliothek 8-6-5(1906-1908, 1913) 1908
SP13 Chiriguano SP13
Chaco SP3

C
241 water-melons, melons, figs, tonai[1]), oranges, cotton, millet, and reeds for arrow-shafts.

Ca. 241 D451 Bananas are not cultivated. Among the Chané at the Rio Parapiti the sweet-potato is the most important cultivated plant. Of the plants mentioned, the sugar-cane, the melon, the watermelon, the fig, the orange and the millet are not American. All these cultivated plants which have been introduced by Europeans are of slight importance to the Indians. I have never seen manihica cultivated, but I have heard that it is to be met with in the fields of these Indians. As a staple food of the people it is of no importance here.

C 249] Ca. [199] [262]

C Ca. 942. 177 Iron spades bought from the Whites are the tools employed nowadays. Very occasionally one still sees wooden spades. In Part I I have published a map of the geographical distribution of the spade.

The spade in S. America is evidently a western element of culture, i. e. the idea of fitting on a more or less broad blade to the lower part of the digging-stick is plainly derived from the western area of civilization.

Whence the Chiriguano got the idea of the shapely handles I do not know. They are too shapely for the art to have been derived from the Whites. They have obviously a long evolution behind them, and it is very probable that they had their origin in the Mountain area of civilization.

Hoes with iron blades occur. The Indians have got them from the Whites. I have not seen any primitive hoes, although we are here on the border of the area of distribution of the genuine American hoe[2]).

The Chiriguano and Chané use a small implement for removing the corn from the corn-cobs which I have described in Part I. P. 32.

---

[1]) Cucurbita.

C Ca. [179] [2]) It is incorrect to affirm, as Wissler does, (P. 17) that the hoe was unknown in S. America. Incas had hoes and they are found still among the Quichua.

Schwedenstiftung II-3,4(1908-1909. 1913) 1920
SF10 Chiriguano SF10
Chané SF8

VI.

Domestic Animals.

Apart from the dog, the Chiriguano and Chané keep only European domestic animals. There is now no genuinely Indian breed of dogs here. Cattle-breeding is of some importance in certain parts, especially in the Caipipendi valley. Milking the cows is not understood. Some of these Indians keep large numbers of sheep and the women spin the wool and weave woollen stuffs. It is not known if they had wool in the pre-Columbian period, as it has not been ascertained whether these Indians kept llamas or not. Poultry are of great importance to the Chiriguano and Chané. The Indians in South-America were exceedingly quick to learn the art of poultry-keeping, thus, when CABOT touched the south coast of Brazil in 1526, he got plenty of hens from the Indians by barter.[1]) The Chiriguano and Chané have but few horses. They are not nearly such good equestrians as, for instance the Toba.

I have in my collection a riding whip stock made by the Chané. DEL CAMPANA depicts a very primitive saddle from the Chiriguano. I have seen similar saddles among the Toba Indians.

When these Indians acquired the European domestic animals, the chase must have lost in importance for them. They obtained their meat in another way. The possession of cattle compelled them to enclose their tilled ground, or to have it far removed from the pastures.

---

[1]) MEDINA (2) T. 1. P. 458.

StNordenskiöld E-5,v(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chané SF8

C Ce 177 [191]

are chiefly used by the men. It is clear that the latter learnt more from the Whites than the women, for they came into contact with them to a far greater extent. Hence many of the men, but few of the women, learnt to speak Spanish. All the Chiriguano and Chané men now clothe themselves more or less like the Whites, that is to say in shirt and trousers. Few have coats. You rarely see anyone with boots, and never anyone with stockings. Practically all the Chiriguano and Chané women still wear the tipoy. It is usually made of cloth bought from the Whites. But in some villages the women still have a predominance of home-woven tipoys. The clothes worn by the men, and which are of the same cut as those of the Whites, are not their own make, but are obtained ready-made in exchange for manual labour. The cloth for the women's tipoys, too, which they make up themselves, is as a rule earned in similar wise by the men. The Indians now obtain the implements for all these things from the Whites.

C Ce 291 177

C Ce 241 177

The agriculture of the Chiriguano and Chané has been very little affected by the Whites. As the banana cannot be cultivated here with any success, the Indians have not been able appreciably to improve their conditions of life by extensive planting of the cultivated plants introduced by the Whites. For some of the Chiriguano and Chané Indians, cattle-breeding has become of considerable importance.

C Ce 177 [233]

Seventeen of the cultural elements included in the tables may be regarded as articles of luxury. These are games, musical instruments, etc.

The domestic industry of these Indians has been very little influenced in its development by the Whites, a fact on which I laid stress in speaking of their pottery, which has remained in a wonderful manner untouched by 400 years of intercourse with missionaries and others. I here repeat that even the instruction given in the mission schools in embroidery, lace-making and the like, has but very slightly affected the native domestic industry of the In-

S:Nordenskiöld E-5/4 (1908-1909, 1913) 1920
SF10 Chiriguano SF10 ●
Chané SF8

C
Ce
177

guano until they had settled in their present territory, let us say by trade or other connections with the tribes living in N. E. Bolivia. I will not assert that this is impossible, but I am of opinion that it cannot apply to most of these cultural elements. In any case it does not apply to such cultural elements as rubber balls, certain kinds of basket work of palm-leaves, and hammocks, which clearly overstepped the natural confines as a result of emigration. The rubber for the balls must be procured from the north, and suitable palm-leaves for basket-work is not to be found locally. The hammock is not the kind of bed best suited to this part of the continent.

C
Ce
177
241 ●

Mandioca is now cultivated only as a rarity by the Chiriguano and Chané. It is highly probable that, before they settled in their present habitat, this plant was of considerable importance to them. Neither the Chiriguano nor the Chané depended so largely on maize before they came to the parts they now inhabit. Here they have an excellent soil for growing maize.

C
Ce
177
226

Fish and game are now certainly of less importance to these Indians than they used to be. I mentioned earlier that the Chiriguano and Chané now make the impression of fishermen without water to fish in. A method of fishing which is of no little importance to the kinsmen of these Indians, is fishing with poison. In these parts it is rare, but occurs, at least among the Chiriguano.

C
Ce
177
824

»Chuchio» (*Gynerium* sp.) was formerly the plant that yielded at least the material for the arrows of the Chané Indians. As it has now been uprooted, its place is taken by another growth of grass, *Arundo donax*. It was not until post-Columbian times that this reed, which is used by the Chiriguano, Chané, and all the Chaco tribes for the shafts of their arrows and for other purposes, was introduced into S. America, where now, not least in El Gran Chaco, it has an exceedingly widespread distribution. (I ought to have pointed this out in the First Part of the pre-

[text continues on p. 212]

/152 cont./

earrings with real "diamonds," rings with "sapphires," or other fine things, which she could then show off at the next drinking bout.

There are always two villages in these mission stations, one for the heathens, one for the Christians. I myself always felt more comfortable in the former, and this not only because more fine, old things were to be collected there, but also because the people there were friendlier, more tactful, and more polite in their behavior. The mission children were importunate and impudent.

Near Machareti there is a large basin-shaped valley through which flows a little brook that probably swells to a roaring river after a violent tropical rain and disappears in the wilderness of the Chaco. Quite near the mission it leaves the handsomely dissected mountains, where small petroleum springs trickle out everywhere in the crevices of the cliffs. Then it flows through a hilly landscape that gradually turns into the vast flat area of the Chaco. The vegetation in these regions is not very luxuriant. The woodland, when such is present, is sparse, low, shrubby, and monotonous. The fields seem to produce abundant harvests, the droughts seldom too long. These regions are often devastated by huge swarms of locusts. I have seen these destructive animals cover the woodlands like large, reddish-brown clouds.

From Machareti we went by way of Itatiqui, a very interesting Chiriguano village in an arid region, to the Rio Parapiti.

The latter comes from Pomabamba and Sauzes, from the /153/ mountains of the Quichua /Quechua/ Indians. After it has left these, in the rainy season, it is a roaring stream overflowing its banks. In the dry season it carries little water. The Rio Parapiti also ends in the Chaco. During the rainy season it is lost in the swamps; in the dry season it disappears in the fine sand. If the Rio Parapiti parades on the maps, as the southernmost tributary of the Amazon River, this is only empty boasting on its part. The woodlands along the Rio Parapiti consist mostly of bushes and low, fine-leaved trees, caraguata, and cacti.

6: Nordenskiöld--35 E-5 (1908-1909) 1912 SF10 Chiriguano SF10
Chane SF8

/181 cont./

Branches of Subsistence

Fishing and hunting do not play an important role among the Chané and Chiriguano. As I have mentioned before, they are farmers, primarily maize farmers. These Indians live so exclusively on maize that for them all other food plays a subordinate role. The Indians living on the Rio Parapiti are an exception: they plant more sweet potatoes than maize, and these yield an excellent harvest in their country.

/182/ The following plants are grown by the Chané and Chiriguano:

Sweet potatoes.
Maize.
Squash (Cucurbita pepo Lin.).
Calabash fruits.
Beans of different varieties.
Cotton.
Urucú.
Tobacco.
Tuna (for example, at Yatavéri). Opuntia.
Millet.
Mandioca (rare).
Reed for arrow shafts (on the Rio Parapiti).

In the plantings of these Indians I saw neither ordinary potatoes nor bananas. The sweet potatoes, according to Batirayu's statements, were introduced at a late period by the whites. Tobacco-raising is insignificant. The Chané and Chiriguano are not great smokers. They mostly smoke cigarettes in maize leaves, seldom pipes (Fig. 88). Among them one need not give his pipe to a neighbor for further smoking.

It is strange how the use of tobacco differs among the Indian tribes. The Aymara and Quichua /Quechua/, who chew coca, very seldom smoke. They have no taste for it. The Chacobo and Amahuaca, two tribes with whom I became acquainted on my travels, smoked just as little. When I offered a Chacobo a

When I offered a Chamé SF 8 Pacaguara SF 19

/182 cont./ Chacobo a

cigarette, he took only a few puffs, kept the smoke in his mouth for a few seconds, and then threw the cigarette away. Nevertheless, the Chacobo plant tobacco, but use it exclusively as a remedy. If a Chacobo gets a "boro," a fly larva, "Dermatomya," under his skin, he covers the fly larva's entry spot with tobacco powder and is then able to squeeze out the dead larva in a few hours. The Choroti and Ashluslay are passionate smokers. /183/ For them smoking is one of the greatest enjoyments of life. These contrasts are quite strange.

The Chiriguano and the Chané have extensive plantings which, in contrast to the clearings of the Choroti and Ashluslay in the wilderness, are well tended. In former times they used spades made of hard wood with attractive handles (Fig. 89), but these have now gone out of use and have been entirely supplanted by iron spades. Not infrequently the fields lie far from the villages, as, for example, in the Colpipendi valley. This is due to the fact that water is not available throughout the year everywhere in the vicinity of the plantings.

As has been mentioned, the produce obtained is stored in granaries built on piles (Fig. 84), so that it will be at least somewhat protected from rats, moisture, etc. These granaries are seen everywhere, except among the Chané on the Rio Pilcomayo.

The fields are fenced in with fences built brush-shaped, which are often difficult to climb over. There is no fertilization of the fields. On the other hand, a field that has been exhausted is left to lie fallow.

The time of sowing is determined by the position of the Pleiades, "ychu." When this passes across the horizon very early in the morning, it is sowing time. When the rainy season begins, everything must be sowed.

The men clear and sow. Everyone helps with the harvest, men, women, and children. Among the Chané in the Ityuro valley the men sowed the maize, that is, they took care of the larger plantings, whereas the women were gardeners and planted gourds, beans, etc.

Ce 821 /294 cont./

"yánduinyaka," the head of the ostrich; the two largest stars in Centaurus are "yánduipoy," necklace of the ostrich; Venus is called "coemilla," morning; Orion with the sword "húirayúasa" (birds meet). Another constellation is "huázupucu," roebuck horn; another, "borévi," tapir. They call the Pleiades "ychu," but they do not know the meaning of the name, and this is the most important constellation of all.

Ce 821 If one sits with the Indians in their huts, they can indicate the position of the most important constellations in the sky without seeing them. They know their position at all times of the year.

Ce 821 805 Ce [241] The starry sky is not only the watch and the compass of the Indians. It is also their calendar. In this the Pleiades play an especially important part here, as among other Indians. When they first /295/ become visible on the horizon at dawn, the proper time has come for the sowing of maize. The fact that this relatively unimportant constellation plays such an important role in the astronomy of the Indians has given rise to fantastic speculations about Babylonian influence.

Ce 821 If one asks Indians about the size of the stars and their distance from us, they stand there perplexed and prefer not to answer at all. They understand, however, that they must be far away.

C 821 773 The stars do not play an important role in the legends. The Chiriguano chief Maringay, however, said there was once a brother who was playing with his little sister. They tried to catch each other, they sang and jumped. Now they are sitting in the firmament as two stars.

Two clusters of stars in the southern part of the southern firmament are the ashes of an old man and an old woman, a Chiriguano once told me. It was an evening in August.

Ce [821] [773] In legends, the sun is a man and the moon a woman. The Chané children stole fire from an old man, the sun, and the two-headed Yahuéte hid under the tiru of the moon-woman when he was being pursued by the son of the armadillo-god.

7:Rosen E-5 (1901-1902) 1924 SF10 Chiriguano SF10
Chané SF8

The Chiriguano inhabit the part of the Andean region, bordering on the Chaco, that roughly extends from the 18th to the 22nd degree of S. latitude. Within this region there is also found another tribe, viz., the Chané. These two tribes do not occupy each a territory of its own, but Chiriguano as well as Chané villages are found throughout the whole district thus jointly inhabited by them. No enmity exists nowadays between these culturally allied tribes. After the last great Indian rebellion against the whites (in 1890), a small portion of the Chiriguano tribe moved away into the interior of Gran Chaco, where it is believed that they are still remaining.

The western Chiriguano country, in which part the majority of the tribe is living, consists mainly of partly forest-clad mountain ranges, flanking wooded (fig. 187) or grass-grown valleys and small plains. It is a poorly watered country, but it mostly gives good crops, particularly gourd plants and maize. The climate is tropical, but in the higher parts the heat is not especially trying, except during the hottest season.

Although the Chiriguano and the Chané are on much the same level of material culture, they do not, however, belong to the same racial group, the Chiriguano being counted with the Guarani group, whilst the Chané are Arawak. The Chiriguano, according to Matienzo, took possession of their present country in the beginning of the 16th century, when a portion of the original inhabitants emigrated and settled in the Tarija valley.[1] Possibly the subjugated Indians belonged to the Chané tribe. In later times this tribe has adopted the language of the Chiriguano, which is Guarani. Whence the Chiriguano originally came is not known, but it may be taken as probable that, formerly, this tribe inhabited the lower reaches of Rio Parapiti.[2] The name of Chiriguano (quichua), which means »dirt people» was given them by the vainglorious Incas, who despised the Chiriguano people, affecting to look upon them as barbarians. The word »guano» is the name for the well-known bird manure-found on the coast of Peru and Chile. It seems however unfair indeed that the Chiriguano, who, in contradistinction to the Puna and Chaco Indians, are scrupulously cleanly, should suffer from such a misleading and discreditable tribal name.

---

[1] de Matienzo (1), p. 130. Nordenskiöld (18).
[2] Nordenskiöld (18), p. 156.

7:Rosen E-5 (1901-1902) 1924 SF10 Chiriguano SF10

[P.205]

CHAPTER VIII.

The Chiriguanos (2).

Industries. Cultivated plants. Hunting. Fishing. Vessels for food and drink. Intoxicants and stimulants. Music and dancing. Social order. Customs governing marriage, childbearing, illnesses, death and burial. Character and temperament. Belief in metempsychosis.

The Chiriguano are mainly an agricultural people, but they also do a certain amount of hunting and fishing. Maize is the most important of their cultivated plants, and it is very extensively grown by them. Many other Indian domestic plants are also cultivated, viz. pumpkins, sweet potatoes, beans, mani, cactus with edible fruit (Opuntia), tobacco, cotton, urukú (Bixa orellana), and a reed plant (Arundo donax) for making arrow-shafts. Of imported cultivated plants grown by the Chiriguano, I have seen melons, water melons, sugar cane and oranges. According to Nordenskiöld, they also grow figs and millet,[1] these latter of course also having been introduced by the whites. Nowadays, European spades and hoes are used for loosening the soil. Among wild-growing food plants the algarrobo tree (Prosopis alba) is, to the Chiriguanos, the most important one. The Indians also prepare from the fruit of this tree an intoxicating drink to which they are much addicted.

The Chiriguano larder does not to any great extent depend on hunting the game, but formerly hunting must certainly have been an important source of subsistence. Snaring is, nowadays, the only method of hunting employed by the Chiriguano. The long-bow, the pellet-bow, slings, bird-nets and clubs are still occasionally used in hunting.

In olden times the Indians were good shots with the bow and arrow, and, according to Lizarraga, they then used bows the height of a man.

[1] Nordenskiöld (18), pp. 93 and 94.

231 /18 cont./ With
262 respect to the eating of meat, the Chiriguano depend on their livestock, which, however, according to Nordenskiöld, since they omit the raising of pigs and chickens, is not so numerous as the livestock of the Chorote and the Churupí. They do not
262 eat the flesh of asses, horses, /18/ and dogs (78). Although
241

78. Nord. 1, p. 190.

we do not have exact data on the amount of meat that their livestock yields, we can suppose that it is not very great, and thus these Indians depend principally on vegetable foods, that is, on the products of their agriculture. We should say that, in comparison with maize, all other foodstuffs have almost no importance, except among the Indians of the Parapití, among whom the sweet potato is the most important food (79).

79. Nord. 1, p. 181.

261 In times of shortage they eat various wild plants, principally
273 the sweet pods of the algarroba (November-December), which, coarsely chopped up with water, they allow to ferment in order to produce a kind of chicha which has inebriating qualities (80).

80. Nord. 1, p. 226. Métraux I, pp. 361 and 362.

262 Since meals consist principally of maíze, they are very
252 monotonous, although the maize is eaten by them in many different forms, either boiled or parched, or as a flour cooked in steam, as a fried maize-cake, in embers /rescoldo/, or as a soft maize-pudding (81). Meat is eaten roasted or boiled.

81. Nord. 1, pp. 188 and 189. Métraux I, pp. 356-358.

263 together with maize. Cooking salt is used at meals. While
317 previously salt (dyûki) was obtained from mines or extracted
459 from earth from salt licks /barreros/, today it is obtained

fr Schmidt--UC E-5 (1928) 1929 SF10 Chiriguano SF10
Chané SFS

Ee
524
199 /37 cont./

These Indians received two games of chance from the whites, the game of dice, which they call by the Spanish name "dado," and the game with a cow's leg bone, which they call "taba."

Agriculture

C
Ce
241 I have already explained in the chapter on food and drink that the cultivation of maize as an agricultural product is common, and among the Chané of the Parapití the cultivation of the sweet potato. Mandioca is only cultivated rarely and has no importance in the economy of these Indians. Various species of beans are planted, also one species of cactus, some gourds which have edible fruits, and also a little tobacco. In addition to these edible or stimulating native plants that are cultivated, there are some others received from the whites, but these have little importance in the economy of these Indians. According to Nordenskiöld (171), they are the following: sugar

Ee
241
199

171. Nord. 7, pp. 23 and 24.

cane, peanuts, watermelon, muskmelon, figs, oranges and millet. and Métraux also mentions the pepper among them (172).

172. Métraux 1, pp. 338 and 339.

C
Ce
241
(415)
383
386 In addition to these edible or stimulating plants, there are cultivated various species of gourds whose fruits are not edible but are used to make containers, cotton for making thread, urucú for obtaining red dye, and, among the Indians of the Parapití, also a species of cane, Harundo Donax /Arundo donax/, which grows wild in great quantity on the banks of the Pilcomayo, but not on those of the Parapití River.

/37 cont./

The sort of agriculture which these Indians commonly practice is that which we can define with the term "el rozado" /the clearing/, which best corresponds to the technical German word "Waldrodung," which is used for this concept. A piece of woodland is cleared, and the land cultivated in this manner is planted as many times as possible until it is exhausted. According to Métraux (173), the place intended

173. Métraux 1, p. 334.

for planting is first cleared of underbrush, which is cut with a large stick edged on both sides, and this is burned on the site. Métraux /38/ has also compiled from the literature the respective statements on the method of planting maize (174).

174. Métraux 1, p. 337.

Almost all the implements used for this cultivation, such as spades and iron hoes, have been obtained from the whites. The wooden spade, which the Chiriguano doubtless received from the culture of the ancient Peruvians and which was formerly universally used by them, is very rare today (175).

175. Nord. 1, p. 188. Métraux 1, pp. 335 and 336.

According to Nordenskiöld, these spades were made of a hard wood and had an artificially formed handle. Two such spade handles with a special handhold at the upper end are shown in drawings by Nordenskiöld and two similar ones by Métraux (176).

176. Nord. 1, Fig. 89. Métraux 1, p. 336, Figs. 3 and 4.

In the Chané legends written down by Nordenskiöld, there is also mentioned, in addition to the spade, the wooden punch, which is a very common agricultural implement among most

8: Schmidt--94 E-5 (1935) 1938 SF10 Chiriguano SF10
Chané SF8
Izozo

/38 cont./

of the Indians of South America who have agriculture. In one of these legends it is said that (177) Tunpa, after having

177. Nord. 1, p. 280.

created the grandparents of the Avás (Chiriguano) and Chané, gave them a wooden spade and a long carved stick, called "carumpa," and bows and arrows so that they might feed themselves with these implements. In the other legend it is told that the jaguar goes to get the punches when the fox wants to help him plant his field (178). From the indications

178. Nord. 1, p. 289.

by Métraux mentioned in the foregoing, it follows that the Chiriguano still use such an implement in their agriculture.

The Chiriguano in Macharetí had some plantings near their town, but, because of the extraordinary drought at that time, these had produced nothing. The Izozó near Toledo had cleared large areas, but were unable to plant for the same reason. According to Nordenskiöld (179), the large

179. Nord. 1, p. 183.

plantings of the Chiriguano and the Chané are often far from their towns and are enclosed by thickets.

The Raising of Livestock

Of the domestic animals native to South America, the Chiriguano and the Chané have the South American dog, which today is mixed with the blood of European dogs (180).

180. Nord. 1, p. 187. Nord. 2, p. 49.

R Schmidt--231 E-S (1933) 1938 SF10 Chiriguano SF10
Chané SF8

Ce 692 G433 28

/89 cont./
of the deceased (359).

359. Nord. 1, p. 231.

C 421

Private property is highly respected among the Chiriguano. According to Métraux, even the closest relatives cannot make use of the property of one of them without his consent. The

C 423

possession of a piece of land is guaranteed to a Chiriguano by planting any plant on it or by clearing the circumference of the land required and making large slashes in the trees. When he selects a plot for his planting, the Chiriguano examines it carefully to determine that there are no traces of a previous planting (360).

360. Métraux I, pp. 334 and 340.

C
•241 476 [622]

After the land selected for the planting has been cleared, relatives and friends are called together to help with the work. Formerly, the cacique of the town also took part by keeping watch for the workers (361).

361. Métraux I, p. 337.

/90/

Religion

C Ce 797 991 178 538

In their many years of activity the missions have naturally influenced notably the religious actions of the Chiriguano and Chané. Most of them today are Christians. Some still retain part of their primordial ideas, expressed in their legends. I shall limit myself here to referring the reader again to the Chané legends taken down by Nordenskiöld (362) and mentioned several times in the preceding.

362. Nord. 1, pp. 251-296.